



Serial No.: 10/502,060
U.S. Pat. & Tm. Off. Docket No.: P69752US0

IN THE CLAIMS:

Please amend the claims as follows:

Claims 1-13 (Canceled).

14. (Currently Amended) A tubular film die head for extruding single-layer or multi-layer film, comprising:

an annular die gap; and

at least two fastening elements having coolant-carrying capability, said fastening elements passing through holes in said die head and fixing at least two components which together border areas bearing plastic melt within the tubular film die head against one another, at least one of said fastening elements having a coolant intake line formed therein and at least one of said fastening elements having a coolant discharge line formed therein, said fastening elements being loosely constrained in said holes between opposite ends of said fastening elements, coolant running through said coolant lines resulting in said die head having a higher temperature during operation than a temperature of said fastening elements, said die plate at said higher temperature expanding more than said fastening elements to increase a force exerted by said fastening elements in fixing said components together.

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15. (Previously Presented) The tubular film die head according to claim 14, wherein the holes through which the fastening elements are engaged are encased, at least in part, with a thermally insulating material.

16. (Previously Presented) The tubular film die head according to claim 14, wherein cavities are provided in areas of the holes in the die head through which the fastening elements are engaged.

17. (Previously Presented) The tubular film die head according to claim 14, wherein in areas of the holes in the die head through which the fastening elements are engaged, the fastening elements and inner walls of the holes jointly form cavities in the die head.

18. (Previously Presented) The tubular film die head according to claim 14, wherein the fastening elements are disposed eccentrically in the die head.

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19. (Previously Presented) The tubular film die head according to claim 14, wherein the fastening elements clamp down an inner nozzle ring, bars, and a connecting plate and fix them with respect to one another.

20. (Previously Presented) The tubular film die head according to claim 14, wherein the fastening elements clamp down all the components which border the melt-carrying areas.

21. (Previously Presented) The tubular film die head according to claim 14, wherein the fastening elements include, at least in part, a thermally insulating material.

22. (Previously Presented) The tubular film die head according to claim 14, wherein each of said fastening elements is cylindrical.

23. (Currently Amended) The tubular film die head according to claim 14, wherein each of the fastening elements ~~are~~ is provided with a head at one end and outer threads at an opposite end ~~ends~~ thereof, said opposite end being engaged with a

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correspondingly threaded nut when said fastening element is mounted and fixing said components together.

24. (Currently Amended) The tubular film die head according to claim 14, wherein the fastening elements are bolts or screws ~~provided with heads at ends thereof.~~

25. (Currently Amended) A process for the mutual fixation of at least two components which together border areas carrying plastic melt within the tubular film die head, comprising the steps of:

fixing a first fastening element having a head and an opposite threaded end through at least two components which together border areas carrying plastic melt, said first fastening element including a coolant carrying intake line formed therein;
and

fixing a second fastening element having a head and an opposite threaded end through said at least two components, said second fastening element including a coolant carrying discharge line formed therein;

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securing said threaded ends with at least one separate correspondingly threaded component so that said fastening elements are loosely constrained; and

conducting coolant through said fastening elements so that the contact force of the at least two components against one another is increased when said components heat up and expand more during the extrusion process than the fastening elements which are being cooled by said coolant.

Claims 26 & 27 (Canceled).

28. (Currently Amended) A tubular film die head for extruding single-layer or multi-layer film, comprising:

an annular die gap;

die head components including an inner nozzle ring, two bars, and a connecting plate which border areas bearing plastic melt within the tubular film die head; ~~and~~

at least two fastening elements each having a head, an opposite threaded end and ~~having~~ coolant-carrying capability, said fastening elements passing through ~~holes in said die head and fixing~~ said inner nozzle ring, bars, and connecting plate, said fastening element heads abutting against said inner nozzle

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ring and said threaded ends protruding from said connecting plate
and being engaged with a correspondingly threaded component to
fix said ring, bars and plate against one another, at least one
of said fastening elements having a coolant intake line formed
therein and at least one of said fastening elements having a
coolant discharge line formed therein; and

said fastening elements and said components being
configured so that coolant conducted through said coolant intake
line and said coolant discharge line of said fastening elements
increases the contact force of the components against one another
due to the fact that said components heat up and expand more
during the extrusion process than the fastening elements which
are being cooled by said coolant flowing therethrough.

29. (Canceled).

30. (Previously Presented) The tubular film die head
according to claim 29, wherein the fastening elements include, at
least in part, a thermally insulating material.

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31. (New) The tubular film die head according to claim 28, wherein said correspondingly threaded component includes a nut fitted to each fastening element.

32. (New) The process according to claim 25, wherein said step of securing said threaded ends includes screwing a correspondingly threaded nut onto each threaded end.